

REMARKS

Reconsideration and allowance of this application are respectfully requested in view of the foregoing amendments and the following remarks. Because the claims are all provided as new claims, we include the following chart to help the Examiner relate the new claims to the old claims.

US
Application
No.
09/708,087
Claim
Relationships

New Claim	Old Claim Comment
34	33+1
35	33+2
36	33+3
37	33+4
38	33+5
39	33+6
40	33+7
41	33+8
42	9 amended to depend from device claim
43	10 amended to depend from device claim
44	11 amended to depend from device claim
45	12 amended to depend from device claim
46	13 amended to depend from device claim
47	14 amended to depend from device claim
48	15 amended to depend from device claim
49	16 amended to depend from device claim
50	17 amended to depend from device claim
51	33+18
52	19 amended to depend from device claim
53	20 amended to depend from device claim
54	21 amended to depend from device claim
55	22 amended to depend from device claim
56	33+23
57	24 amended to depend from orig. device claim 23
58	33+25
59	33+26
60	33+27
61	33+28
62	33+29
63	33+30
64	33+31
65	32 amended to depend from device claim

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Claims 34 to 62 distinguish from the prior art showing fB of 9 mm or longer.

Claims 63 and 64 distinguish from the prior art at least in part because the third lens group of the prior art is composed only of two single lenses or three single lenses. There is no cemented lens in the third lens group. Note that the respective examples of the prior art show that the lenses in the third lens group are disposed with an air space between them and the curved surfaces including an air space differ in the radius of curvature from each other. Claims 63 and 64 differ from the prior art in that the cemented lens in the second lens group is convex on the image side.

Claim 65 is of the species depending on any one of the aforesaid claims, and so is different from the prior art.

Claims 66 to 74 are different from the prior art in terms of the lens arrangement of the third lens group.

Tabulated below are comparisons of the presently claimed conditions with those of the prior art US Patent No. 6,016,228. In the following table "OUT" indicates departures from the claimed scopes.

EXAMPLE	1	2	3	4	5	6	7	8	9
(1) $0.5 < F2/F3 < 1.2$	0.65	0.52	0.35 OUT	0.32 OUT	0.35 OUT	0.43 OUT	0.51	0.46 OUT	0.48 OUT
(2) $0.49 < L3/L2 < 1$	0.64	0.63	0.71	0.81	0.90	0.62	0.72	0.72	0.73
(3) $2 < (F3.4W)/IH < 3.3$	3.92 OUT	3.98 OUT	3.69 OUT	3.84 OUT	3.72 OUT	3.73 OUT	3.51 OUT	3.48 OUT	3.50 OUT
(4) $0.6 < F2/F3 < 1$	0.65	0.52 OUT	0.35 OUT	0.32 OUT	0.35 OUT	0.43 OUT	0.51 OUT	0.46 OUT	0.48 OUT
(5) $0.3 < F3/F4 < 0.8$	0.92 OUT	1.39 OUT	2.01 OUT	2.02 OUT	1.71 OUT	1.31 OUT	1.28 OUT	1.49 OUT	1.41 OUT
(6) $0.4 < \beta 2T < 1$	0.25 OUT	0.35 OUT	0.35 OUT	0.35 OUT	0.33 OUT	0.33 OUT	0.54	0.58	0.54
(7) $v 21 < 40$	49.6 OUT	57.7 OUT	57.5 OUT	55.5 OUT	55.5 OUT	55.5 OUT	60.6 OUT	64.1 OUT	60.6 OUT
(8) $v 21 < 35$	49.6 OUT	57.7 OUT	57.5 OUT	55.5 OUT	55.5 OUT	55.5 OUT	60.6 OUT	64.1 OUT	60.6 OUT

Regarding the claim objections, condition (11) provides a definition of $fB(max)$ whereas condition (10) provides a definition of $fB(min)$. As defined in the claims, condition (10) holds for the case where the length, as calculated on an air basis, from the final surface of the powered lens to the image plane becomes shortest in the whole zoom zone, and condition (11) holds for the case where that length becomes longest in the whole zoom zone.


The limitations of claim 33 rejected on the double patenting basis are included in the various independent claims. Thus, our invention is directed to "IMAGE PICKUP SYSTEM" and, accordingly, the title of the invention and the claims are amended.

In view of the foregoing, a Notice of Allowance is respectfully requested.

Should there be any questions or concerns regarding this application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,

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